Exhibit F

← HOME

U.S. Firms to Spend Nearly \$19.2 Billion on Third-Party Audience Data & Data-Use Solutions in 2018, Up 17.5% From 2017



Dec. 05, 2018

Research from IAB Data Center of Excellence and Winterberry Group Shows Spending Increase, Undeterred by Concerns About Regulation and Data Quality

NEW YORK, NY (December 5, 2018) –The Interactive Advertising Bureau (IAB) and its Data Center of Excellence today released "The State of Data 2018," a study showing that in 2018 U.S. companies are accelerating their spending on third-party, audience data for advertising and marketing efforts. This year, American companies are expected to spend nearly \$19.2 billion on the acquisition of audience data and on solutions to manage, process, and analyze this data—a figure that represents a 17.5 percent increase from the prior year. This expected increase has occurred in part by the rise in programmatic advertising and in spite of increased scrutiny on the use of consumer data (provoked in large part by new and pending data use regulations) as well as concerns regarding the quality of commercial data sets.

2017-2018E U.S. Third-Party Audience Data Expenditures (Supporting Advertising, Marketing, Media Sales & Associated Objectives)

Spending Category	201 <i>7</i>	2018E	Growth
	(billions)	(billions)	Rate
U.S. Audience Data Acquisition	\$10.14	\$11.94	17.7%



This research was compiled by Winterberry Group and is based on an intensive primary research effort, as well as analysis of financial information published by a range of the nation's leading commercial data providers.

For the first time in history, marketers this year will invest more in digital data assets than in traditional "terrestrial" data. Below is a breakdown of spending and growth by third-party audience data acquisition and solutions type:

- Digital (\$3.67 billion, up 36.9%)
- Terrestrial/PII (\$3.62 billion, up 2.5%)
- Transactional (\$2.80 billion, up 3.5%)
- Specialty/Engagement (\$1.02 billion, up 50.9%)
- Identity (\$0.85 billion, up 50.3%)

Data activation solutions help maximize the accuracy and actionability of audience data, while providing contextual brand safety. The report looked at these solutions in two categories:

- Data Management, Processing, and Integration (\$4.97 billion, up 25.1%)
- Analytics, Modeling, and Segmentation (\$2.26 billion, up 2.9%)

Implementation of the European Union's General Data Protection Regulation (GDPR) and passage of the to-be-implemented California Consumer Privacy Act (CCPA) has sparked a wave of investment in infrastructure and technology to control for data security, governance and transparent deployment across channels. This played a significant role in driving growth within the Data Management, Processing, and Integration category.





"Programmatic 22to Vising Nas Taken as Centra Fole in the Imarketing Plands Cape and Phis \$108/2 shows how increasingly vital third-party data has become as a result," said Orchid Richardson, Vice President and Managing Director, IAB Data Center of Excellence. "Third-party data provides insights—from geolocation to interests and more—that can help brands deliver highly personalized messages to consumers and expand audience."

"This annual research initiative reveals the on-the-ground financial trends of marketers' investments in third-party data—many of which, this year, are counterintuitive to the headlines which have long highlighted regulatory and quality concerns," said Jonathan Margulies, Managing Director, Winterberry Group. "The hope is that the U.S. advertising, marketing, and media communities can use this report to better understand how their peers are investing in audience data and use it to assist in guiding their own spending."

"The State of Data 2018" was released at the IAB Data and Mobile Symposium in New York City. The complete study is available for download at iab.com/2018-State-of-Data.

About IAB

The Interactive Advertising Bureau (IAB) empowers the media and marketing industries to thrive in the digital economy. Its membership is comprised of more than 650 leading media and technology companies that are responsible for selling, delivering, and optimizing digital advertising or marketing campaigns. The trade group fields critical research on interactive advertising, while also educating brands, agencies, and the wider business community on the importance of digital marketing. In affiliation with the IAB Tech Lab, it develops technical standards and best practices. IAB and the IAB Education Foundation are committed to professional development and elevating the knowledge, skills, expertise, and diversity of the workforce across the industry. Through the work of its public policy office in Washington, D.C., IAB advocates for its members and promotes the value of the interactive advertising industry to legislators and policymakers. Founded in 1996, the IAB is headquartered in New York City and has a San Francisco office.

About Winterberry Group

Winterberry Group is a unique management consulting and research firm that leverages a combination of operating experience and industry expertise in the intersecting disciplines of advertising, marketing, information, technology and customer experience. Headquartered in New York, the firm helps brands, publishers, marketing service providers, technology developers and information companies—as well as the financial investors who support these organizations—understand emerging opportunities, create actionable strategies and grow their impact and value.

IAB Media Contact

Laura Goldberg 347.683.1859 laura.goldberg@iab.com



